

Claims

1. Separating arrangement comprising a pressurising pump
(1, 10, 12; 71) and separation units for separating a fluid
5 from components contained in admixture, the separation units
necessitating a pressure difference for the separation
process of showing improved performance with increased
pressure of the fluid, characterized in
that an input (40) of the pump is connected to a first
10 separation unit (36),
that an output (43) of the pump is connected to a second
separation unit (45) for supplying it with pressurised
fluid, and
that the first separation unit is connected to an outlet of
15 the second separation unit, the outlet delivering fluid
enriched with admixed component, or to an output of pump, in
order to supply the first separation unit with pressurised
fluid of original or elevated components concentration and,
thereby, to dilute the fluid conveyed through the first
20 separation unit to the pump with respect to the admixed
components.

2. A separating arrangement according to claim 1,
characterized in that the pump is a fluidic loop comprising
25 a loop conduit (12), a circulating pump (10) and a double-
cone device (1) in a loop arrangement, the inlet of the pump
being constituted by the inlet (7) of the double-cone
device, and the output (43) of the pump being constituted
essentially by a conduit branched off the loop conduit.

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3. Installation according to claim 2, characterized in
that a pump (40) is connected with the inlet (7) of the
double-cone device in order to improve the supply of fluid
to the double-cone device.

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4. Separating arrangement according to claim 1,
characterized in that the first separation unit (36) allows
a mass exchange between two fluids, the separation unit

being connected to a pump outlet (14, 15; 37, 43) and an inlet (40) of the pump (1, 10, 12; 71), so that a mass-exchange between the fluid exiting the pump and the fluid entering it through the first separation unit (36) occurs so
5 that the concentration of matter to be separated from the fluid is reduced in the entering fluid.

5. Separating arrangement according to claim 1, characterized in that the second separation unit (45) is
10 capable of separating matter from the fluid, particularly by osmosis, reverse osmosis, filtration, cyclone effect, or chromatography, in order to recover purified fluid and/or concentrated fluid at the exit of the second separation unit.

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6. Separating arrangement according to claim 5, characterized in that the first separation unit (45) is capable of separating matter from the fluid by osmosis, reverse osmosis, filtration, cyclone effect, or
20 chromatography.

7. Use of the separating arrangement according to claim 1 for the desalination of sea-water.

25 8. Use of the separating arrangement according to claim 1 for the separation of contaminations like oil from water.

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